ANNUAL MANAGEMENT REPORT
-1975-

LOWER COOK INLET
REGION II

ALASKA DEPARTMENT OF FISH AND GAME

DIVISION OF COMMERCIAL FISHERIES

ANNUAL FINFISH MANAGEMENT REPORT

-1975-

LOWER COOK INLET AREA

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PREFACE

The 1975 Lower Cook Inlet Annual Management Report is the sixteenth annual volume reporting on the management activities of the Division of Commercial Fisheries staff in Cook Inlet. The Cook Inlet area was divided into two separate management areas in 1974 and separate management reports are now written for each area.

Details of in-season decisions and management strategy for the 1975 salmon fishery and a complete listing of historic catch figures are presented in this report. All fishery data contained in this report are final and supercede information contained in previous reports.

Copies of this report contain no confidential information and may be distributed to the public.

Thomas R. Schroeder, Editor
Area Management Biologist
Lower Cook Inlet.

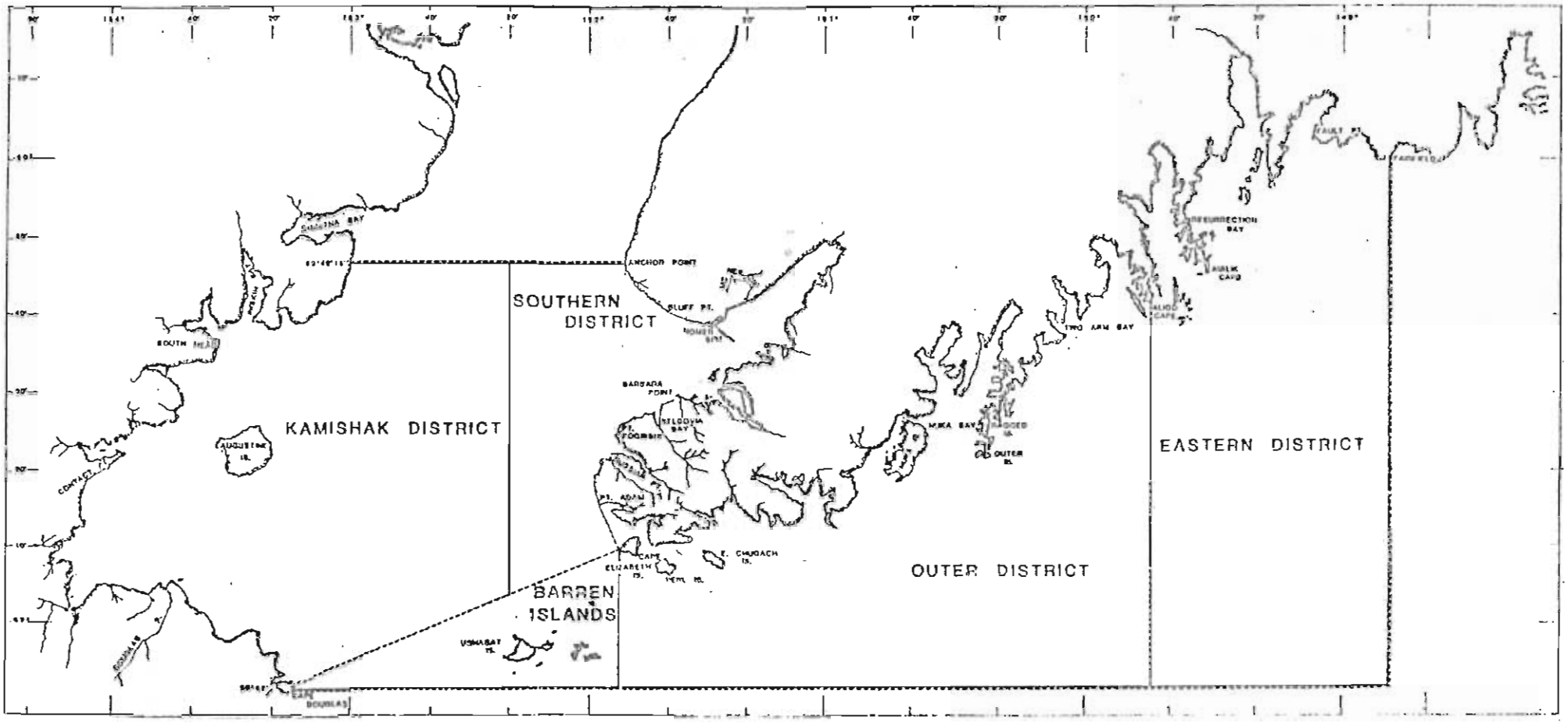

Figure 1. Lower Cook Inlet management area.

INTRODUCTION

The Cook Inlet area was divided into two management areas, Lower and Upper, in 1974 to facilitate management of the expanding salmon and shellfish fisheries. The Lower Cook Inlet area comprises all waters south of the latitude of Anchor Point, north of the latitude of Cape Douglas and west of the longitude of Cape Fairfield and is divided into five fishing districts, the Southern, Kamishak Bay, Barren Islands, Outer and Eastern, with the Barren Islands being primarily a shellfish fishing district (Figure 1).

All five species of Pacific salmon are caught in the area with pink, chum and sockeye salmon being the primary species harvested in order of importance. Salmon are taken commercially by hand purse seines in all districts and by a limited number of set gill nets in the Southern District. Herring, halibut, cod, rockfish, pollock, smelt and other miscellaneous finfish are also taken by commercial, subsistence and sport fishermen.

Practically all shellfish harvested in Cook Inlet come from the Lower Inlet, with the exception of razor clams. Trawl shrimp, pot shrimp and king, tanner and dungeness crabs are the primary commercial species. These species of shellfish along with cockles, scallops and various hardshelled clams are widely utilized by subsistence and sport fishermen in this area. All data pertaining to the Cook Inlet shellfish fisheries are now contained in a separate shellfish annual report.

COMMERCIAL SALMON FISHERY

The 1975 salmon run to Lower Cook Inlet produced a catch of 1.1 million fish, 62 percent higher than the 22

year average of 693,284 (Table 1 & 11 & Figure 2). The strong pink salmon return of 1.3 million to the Southern and Outer Districts was more than double the preseason forecast of 620,000 and produced 95 percent of the Lower Inlet salmon catch (Tables 12 & 13 & Figure 4). Excellent pink salmon escapements were achieved in seven of the nine index streams in these two districts with many of the minor spawning streams receiving record escapements (Table 4 & Figure 5). A very poor chum salmon run was evident throughout the Lower Inlet. The harvest of 21,600 was only 18 percent of the 27 year average and was probably due to a combination of low escapements in 1970 and 1971 and poor freshwater and ocean survival during the severe climatic conditions from 1970 to 1972. The chum salmon escapement of 70,400 to the major Lower Inlet chum salmon streams was the largest recorded escapement since 1964 (Table 5).

Set gill nets in the Southern District produced 95 percent of the total sockeye salmon catch for the Lower Inlet. The Southern District catch of 26,600 was 42 percent above average, but the total Lower Inlet catch of 28,100 was almost 18 percent below average (Tables 1 & 10 and Figure 3). The Eastern District, which no longer produces significant quantities of sockeye salmon, since the conversion of Bear Lake to a coho salmon producing system, was the main cause of this below average catch and probably should not be included in future comparisons.

Very little fishing effort occurred in the Eastern and Kamishak Districts due to the strength of the pink salmon returns to the Southern and Outer Districts. A limited chum salmon fishery did occur in Kamishak Bay in late August, but harvests were minimal (Table 14). Catches were kept to a minimum in an attempt to maximize pink and chum salmon escapements in this district.

Coho salmon were taken incidentally to other fisheries in 1975. The coho catch of 6,200 was slightly above average and was due to the Kamishak District catch which was five times the average catch for that district (Tables 1 & 11).

Permits were issued by the Commercial Fisheries Entry Commission for the first time in 1975. A total of 88 permits, 40 permanent and 45 interim use, were issued, but only 63 permits were fished during the season (Appendix Table 3). The ex-vessel value of the fishery was $1,663,000, over three times the average for Lower Cook Inlet since 1960, and was due to the extremely strong pink salmon harvest (Appendix Table 4). Prices paid to fishermen dropped considerably from the record high prices paid in 1974 (Appendix Table 5).

The 1975 case pack was 162,771 cases and was 32 percent below average for the entire inlet. This was indicative of the lower harvest in Upper Cook Inlet and an increasing trend towards fresh frozen production which was 31 percent above average in 1975 (Appendix Tables 7 & 8).

Southern District

The pre-season management outlook for pink salmon in this district indicated an average run could be expected. Although escapements in the four major spawning streams in 1973 were only half of the escapement goals, excellent winter survival of fry indicated an average pink salmon return (Tables 4 & 6). The season was approached with a cautious yet optimistic outlook as it appeared as though the run would be good to excellent after the warm spring and summer weather of 1974.

The Southern District pink salmon return of 1,042,200 was the largest on record and the record catch of 893,709

was 58 percent above the previous record of 565,216 in 1955 (Table 12). The majority of the catch was taken in the Seldovia Bay and Humpy Creek areas, however, catches in Port Graham and Tutka Bays were the highest since the 1964 earthquake (Tables 7,9 & 12).

The set gill nets, which concentrate primarily on sockeye salmon, began fishing on June 1. The set net catches of pinks in past years have provided an excellent indicator of the strength of the incoming pink run to the Southern District and by July 5, set net catches of pinks were 2.5 times the average catch by that date and by July 19 were more than triple the average catch (Tables 3 & 10).

Pink salmon began showing in Seldovia Bay in early July. An aerial survey on July 7 accounted for 32,000 fish in the bay and most were inside Powder Island. A set of markers was set up at Powder Island and a 48-hour opening was announced for July 10 for Seldovia Bay, Port Graham and Dogfish Bays. A July 8 aerial survey of Seldovia Bay indicated 36,000 pinks inside Powder Island with a total estimate for the bay of 50-60,000.

Pinks continued to build and a second opening for the Seldovia Bay area was announced for July 16. Even with open fishing, fish continued to build inside markers at Seldovia Bay and a marker movment was announced for 6:00 a.m. July 18 by flare. The first sets on that opening took over 100,000 pinks with an additional 80-100,000 still protected in the upper part of the bay. With low minus tides beginning Monday, July 21, the Seldovia Bay markers were moved back to Powder Island, as the minus 2-4 foot tides would have moved the entire escapement out into the fleet. The markers were again moved up the bay on July 25 after the stream escapement counts had increased and the escapement goal was assured.

The harvest of 429,600 pink salmon in Seldovia Bay was the largest recorded catch during the odd-year cycle (Table 7).

Aerial surveys of the Tutka Bay area between July 7 and 9 indicated a buildup of fish in Tutka Lagoon from 200 fish to over 7,500. An opening was announced for the Tutka Bay and Sadie Cove area for July 14 until further notice. Fishing was prohibited inside the HEA power lines to protect schooling pink salmon in the Surprise Cove area that were needed for the Tutka Hatchery egg take.

The F.R.E.D. Division notified us that the Tutka egg take was being reduced by 50% to 2-3 million eggs and a marker movement was made on July 21 which allowed fishing up to the mouth of the lagoon. Pinks moved readily through the fleet and fishing was allowed in Tutka Lagoon from July 28 until August 4. The harvest of over 89,000 pinks (Table 7) was the highest odd-year harvest since the 1964 earthquake.

Good numbers of pink salmon built throughout early July in Port Graham Bay. The area was finally opened on July 21 and the harvest of 18,300 pinks was the largest odd-year harvest on record (Table 7).

Aerial surveys indicated that the Humpy Creek run had finally arrived in the Glacier Spit area on July 20. Over 200,000 fish were observed schooled along the spit with some fish moving around the point towards Humpy Creek. A general opening was announced for the entire Southern District for July 24, but an additional closed area was created between markers at Mallard Bay and Glacier Spit.

Humpy Creek was surveyed by foot on July 21 and only 100 fish were observed in the creek. An aerial survey in late evening indicated a school of 3,000 pinks off the mouth and by July 25, the ground survey counts had increased to

11,000. Markers were adjusted at Humpy Creek on July 28, and fishing was allowed on a seven day per week basis. However, after the escapement had increased to 39,000 by the evening of July 28, an emergency marker removal was made immediately. A weir was constructed on July 29 to try and stop the strong movement of pink salmon into the stream. The weir was eventually pulled on August 6 after most fishermen quit fishing.

The final pink salmon escapement into Humpy Creek of 64,000 was three times the goal for this stream (Table 4). The harvest of over 339,000 pinks was the largest odd-year harvest on record (Table 7).

Outer District

The Outer District was not expected to have a strong salmon return in 1975 as most of the streams in the district suffered extreme losses in production from the 1964 earthquake and the severe environmental conditions during the early 1970's. The pink salmon harvest of 160,291 was 45 percent below average and the sockeye and chum salmon harvests of 720 and 11,350 were 15-17 percent of the historic averages for this district (Table 13).

With excellent returns occurring in the Southern District, extensive closures were maintained in the Outer District in an attempt to maximize escapements to the primary spawning streams. Pink salmon escapement goals were achieved in three of the five major spawning streams with several minor streams receiving excellent escapements (Table 4). A major adjustment was made for the odd-year escapement goals to the Port Dick and Windy Left spawning streams. The Windy Left pink salmon escapement goal was increased from 7,500-10,000 to 25-35,000 and the Port Dick pink salmon escapement was

increased from 22,500-30,000 to 70-100,000 (Table 4). Good chum salmon escapements were also achieved to four major chum salmon spawning streams in the Outer District (Table 5).

Dogfish and Port Chatham Bays were opened for 48 hours on July 10 after aerial surveys indicated a fair buildup of chum salmon inside areas closed to fishing. The Dogfish Bay chum return dropped off completely and while no harvest occurred in this bay, the chum salmon escapement was considered good. The Port Chatham area was reopened on July 28 after good numbers of pink salmon began arriving. Markers were subsequently adjusted and moved further in the bay on August 4 to facilitate harvesting the return. The harvest of 16,000 pink salmon in Port Chatham was the second highest odd-year harvest on record (Table 7).

Aerial surveys of the Aialik and Nuka Bay areas on July 10 indicated excellent sockeye escapements had been achieved in Aialik Lake and Desire Lake. The area from Harrington Point to Aialik Cape was opened on July 14. An additional ½ mile radius closure was in effect around the mouth of Delight Lake where the escapement was lagging and fishing was allowed in Aialik Lagoon. Very few fish were harvested in either area as most fish moved quickly into the lake systems.

The remainder of Nuka Bay was opened on July 25 and extended through the weekend after aerial surveys on July 22 indicated over 14,000 pink salmon in the creek at South Nuka and another 30,000 on the beach. The entire beach area at South Nuka was opened to fishing to facilitate harvesting the return. The pink salmon harvest in Nuka Bay occured primarily at South Nuka and the harvest of 35,400 was the second highest odd-year harvest on record (Table 7).

The pink and chum salmon returns to the Rocky and Windy Bay areas were poor. The Rocky Bay area was kept closed throughout the season. The chum salmon escapement of over 25,000 was considered excellent, but the pink escapement of 4,400 was very poor (Tables 4 & 5).

The Windy Bay area was finally opened on July 28 after the increased odd-year escapement for Windy Left had been achieved. The escapement goal for Windy Left was increased after it was observed that pink salmon were readily moving into the extensive upstream spawning area. The harvest of 18,100 for Windy Bay was considerably below the previous two odd-year harvests (Table 7).

Port Dick Bay was kept closed until late July. The odd-year pink salmon escapement goal was increased to allow additional spawning pinks into the extensive upstream spawning area. The odd-year return, which happens to be the dominant cycle year at this time, appears to have a bimodal run. The early portion of the run through approximately July 25-30 is the upstream, freshwater spawning segment with the intertidal spawning segment showing from late July through the third week of August.

Very few fish were observed in Port Dick until July 17 when surveys indicated over 15,000 pinks schooled at the head of the bay. The weir counts were less than 20 fish until July 19 when good numbers of pinks began moving upstream. Over 9,000 fish had moved through the weir by July 24 and aerial surveys indicated over 30,000 pink salmon schooled along the shores from Middle Creek and Shelter Cove to the head of the bay with another 8,000 below the weir in the intertidal area.

The bay was finally opened on July 31 with over 25,000 fish past the weir and another 30-35,000 located intertidally.

The area along the northshore of the bay from Middle Creek to the falls, southeast of Island Creek, was kept closed to protect chum salmon that were schooling in this area to maximize the chum salmon escapement to Island Creek.

A marker movement was made in the afternoon of July 31 allowing fishing up to the Department cabin at the head of the bay. The harvest of 90,300 pinks was similar to the previous two odd-year harvests, but far below the early 1960 harvests of 200,000 to 1,100,000 (Table 7). The chum salmon harvest occurred incidentally to the pink fishery and the harvest of 6,800 was only 38 percent of the past earthquake average harvest of 18,000 (Table 8).

Kamishak District

Fishing in the Kamishak Distirct has been opened and closed by emergency order, and fishing has been allowed seven days per week, in past years, after the area was opened. The Board of Fish and Game changed the allowable weekly fishing periods in the Kamishak District to two 48 hour periods from 6:00 a.m. Monday until 6:00 a.m. Wednesday and from 6:00 a.m. Thursday until 6:00 a.m. Saturday as occurs in the other districts. Several fishermen that fish this area thought that this restriction would possibly eliminate their fishing due to extreme weather conditions that are prevalent in this area.

The Kamishak District is primarily a chum salmon area with several small pink salmon and sockeye systems. The area south of Nordyke Island was opened on June 26 after aerial surveys of the Mikfik Lake system on June 24 and 26 indicated that the sockeye salmon escapement goal of 5,000 fish had been achieved. No fishing effort occurred and the area was closed on July 5 to protect chum salmon headed for McNeil River.

The Kamishak District south of the outlet of Kirschner Lake north of Bruin Bay was opened to fishing on August 7 to harvest pink salmon headed for Bruin Bay River and Amakdedori Creek. Fishing was allowed to within 200 yards of Amakdedori Creek mouth and to within 100 yards of the large pool at the end of intertidal influence in Bruin Bay. Very little harvest occurred at Bruin Bay, but fishermen did harvest 9,000 pinks in the Amakdedori Creek area.

Good chum salmon returns occurred to spawning streams in the northern part of the district from Ursus Cove to Iniskin Bay. The entire Kamishak District except for Cottonwood and Iliamna Bays were opened to fishing seven days per week on August 19. The harvest of 4,868 chums came primarily from Ursus Cove and Iniskin Bay and was considerably below past years' harvest for these areas (Tables 1, 2 & 8). Over 3,000 coho salmon were also harvested during this same period in the Kamishak and Douglas River area in the southern part of the district. The coho harvest was 8 times the average for the district, but was similar to the 1974 harvest of 2,900 (Tables 1 & 14).

Eastern District

No commercial fishing was allowed in the Eastern District this year. The pink salmon return to Resurrection Bay is primarily an even-year return and the only commercial deliveries for this area were salmon from the Seward Silver Salmon Derby (Table 15).

SUBSISTENCE FISHERY

The Kachemak Bay subsistency fishery opened on Monday August 18 with fishing allowed on the standard two 48 hour periods per week. Considerable interest was shown in the

fishery this year with 292 permits being issued, double the previous two years (Table 16). The total harvest of 2,799 was twice the seven year average and was due to a 70 percent increase in the coho salmon harvest and a harvest of pink salmon that was over four times the seven year average (Table 16). The area at the northeast corner of the Homer Spit called "Mud Bay" was closed to commercial fishing on August 7 to avoid conflict between commercial, subsistence and sport fish user groups.

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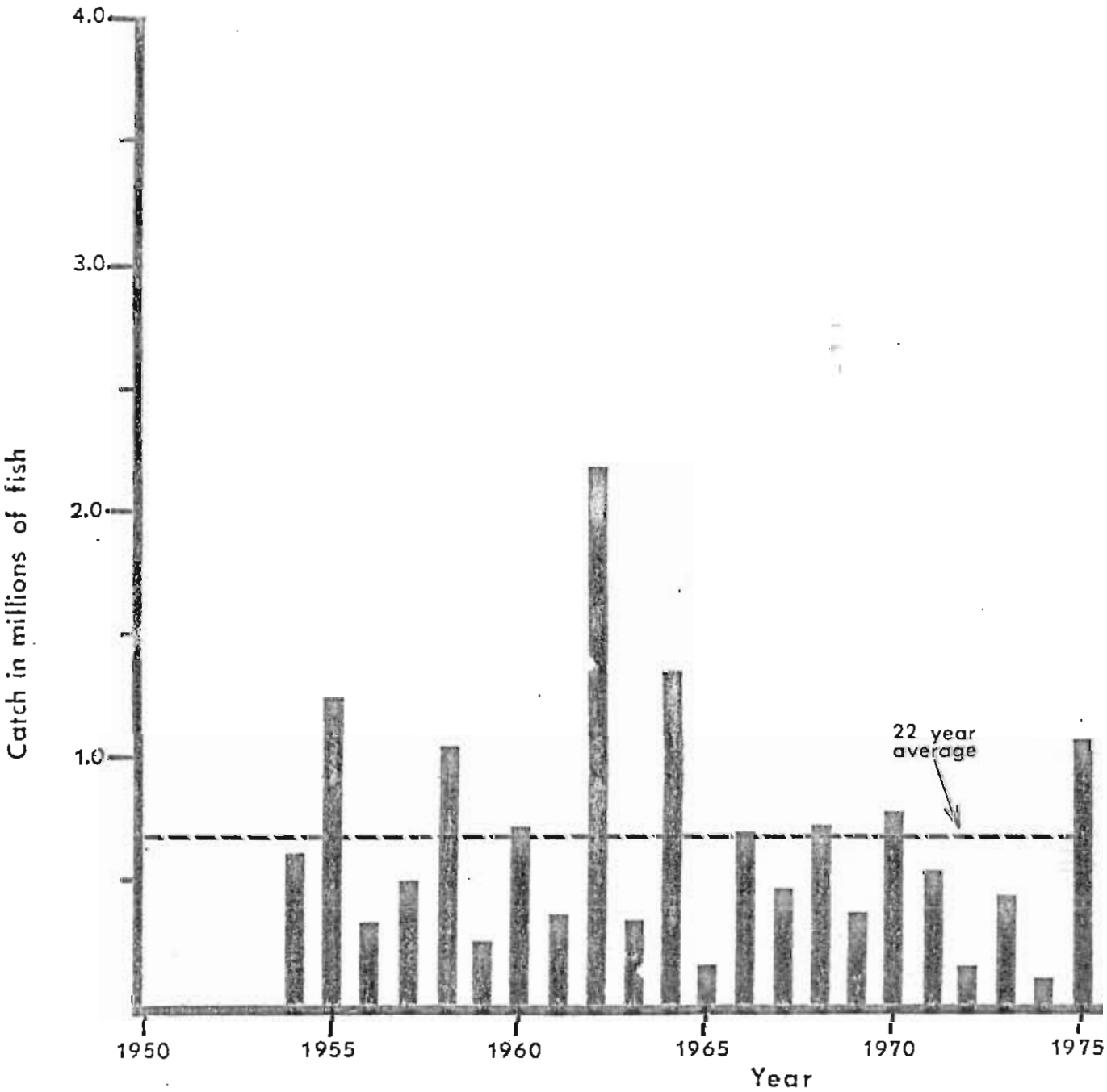


Figure 2. Lower Cook Inlet total salmon catch, 1954-1975.

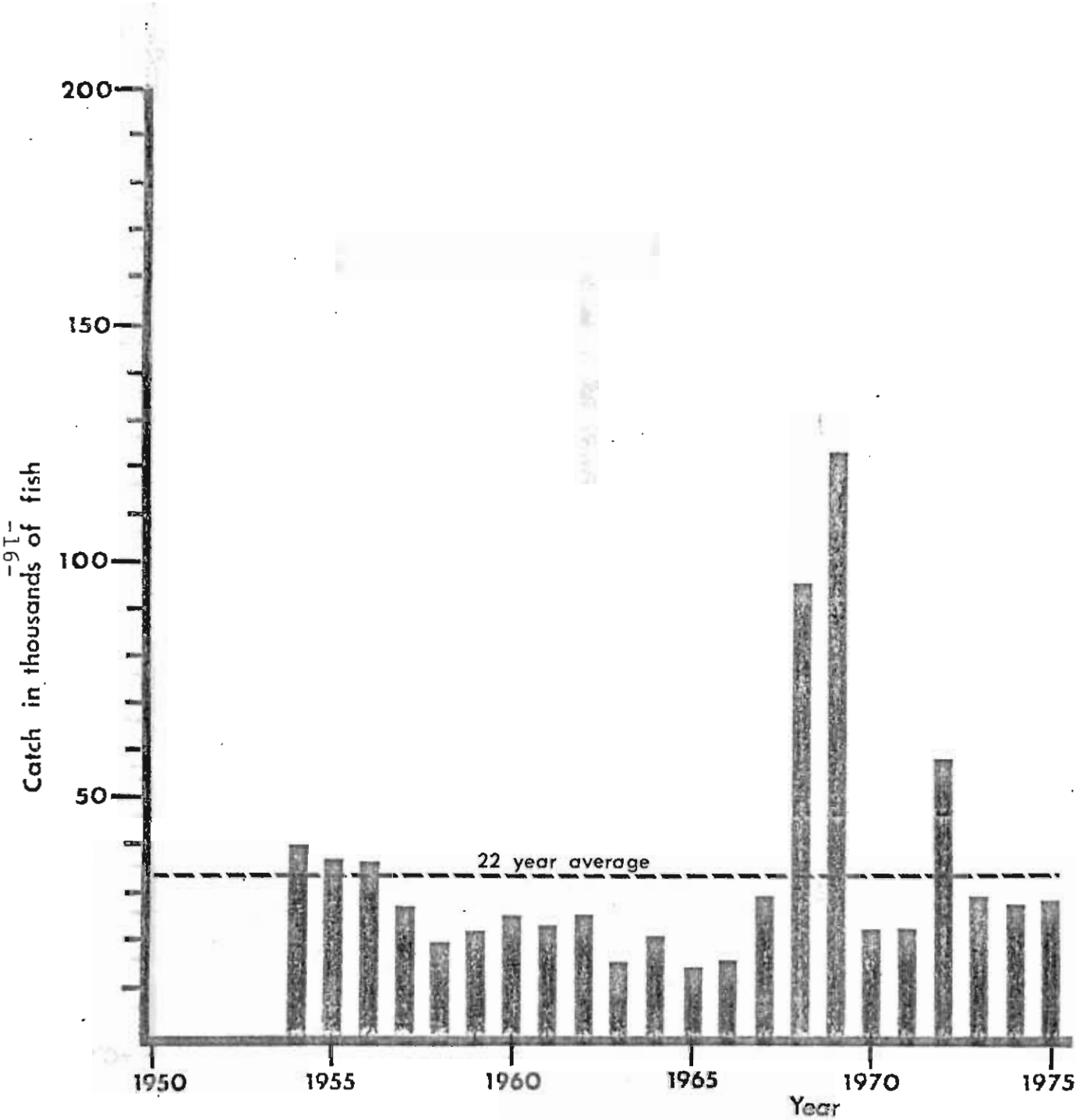


Figure 3. Lower Cook Inlet sockeye salmon catch, 1954 - 1975.

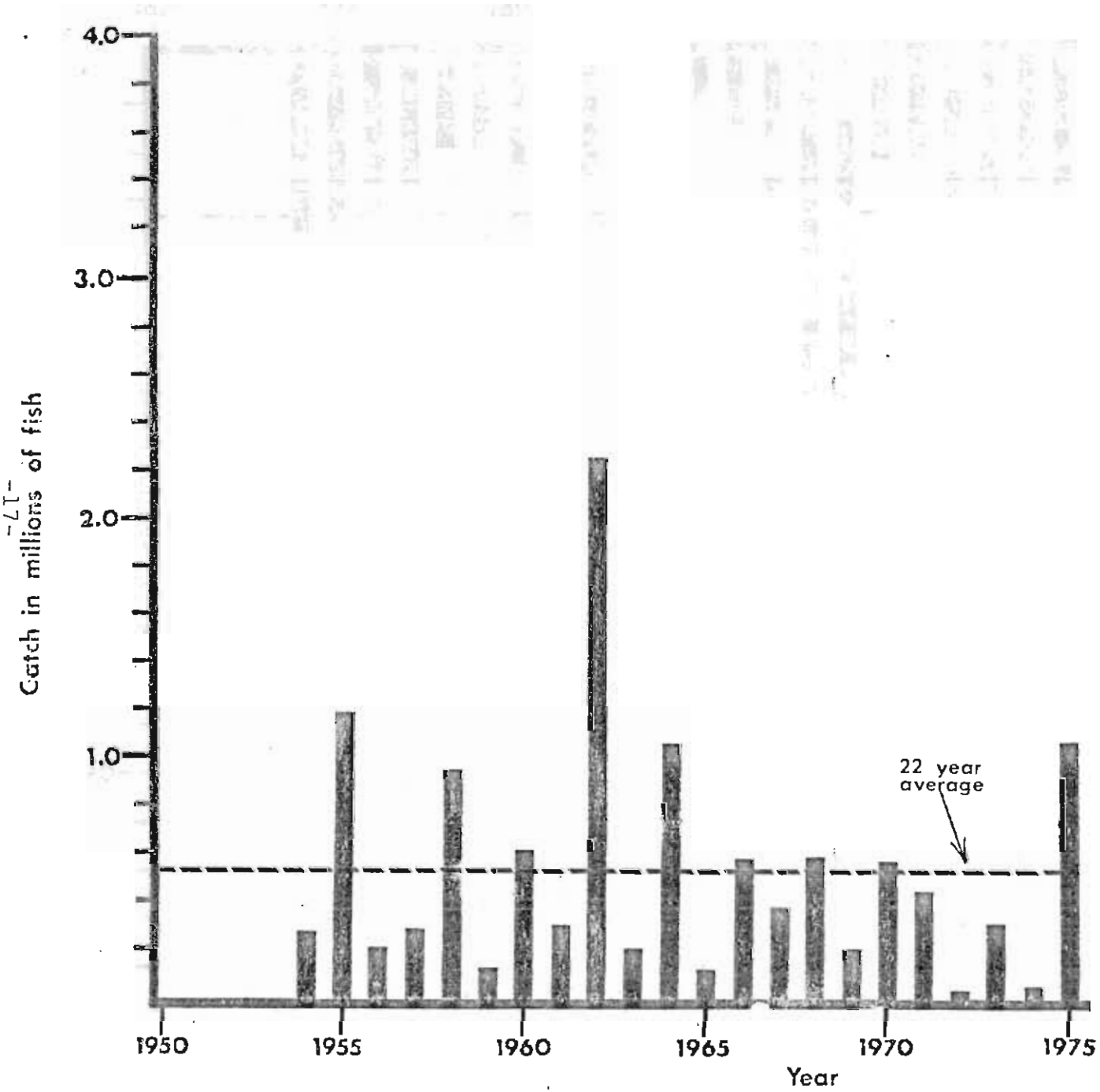


Figure 4. Lower Cook Inlet pink salmon catch 1954 - 197

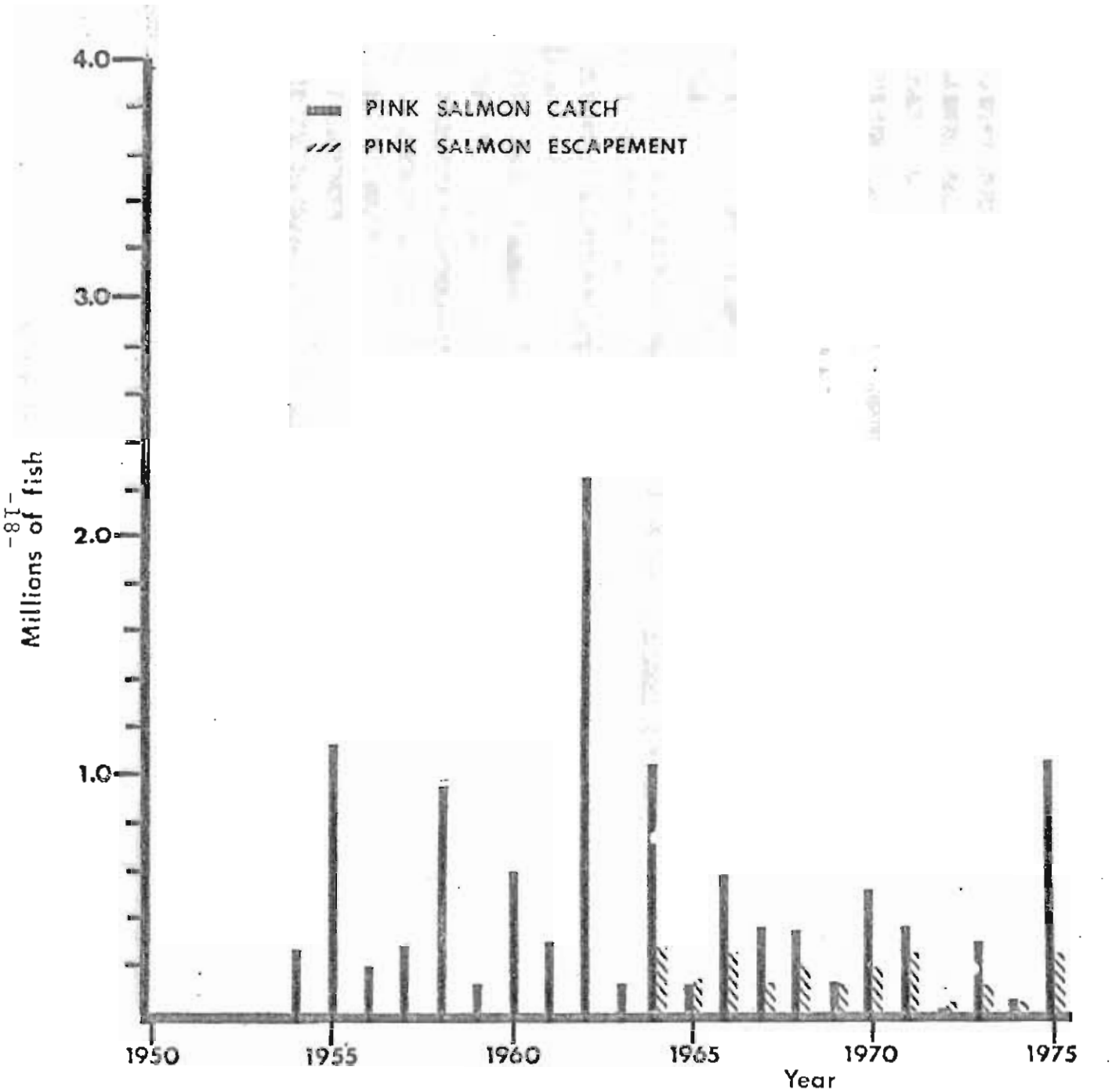
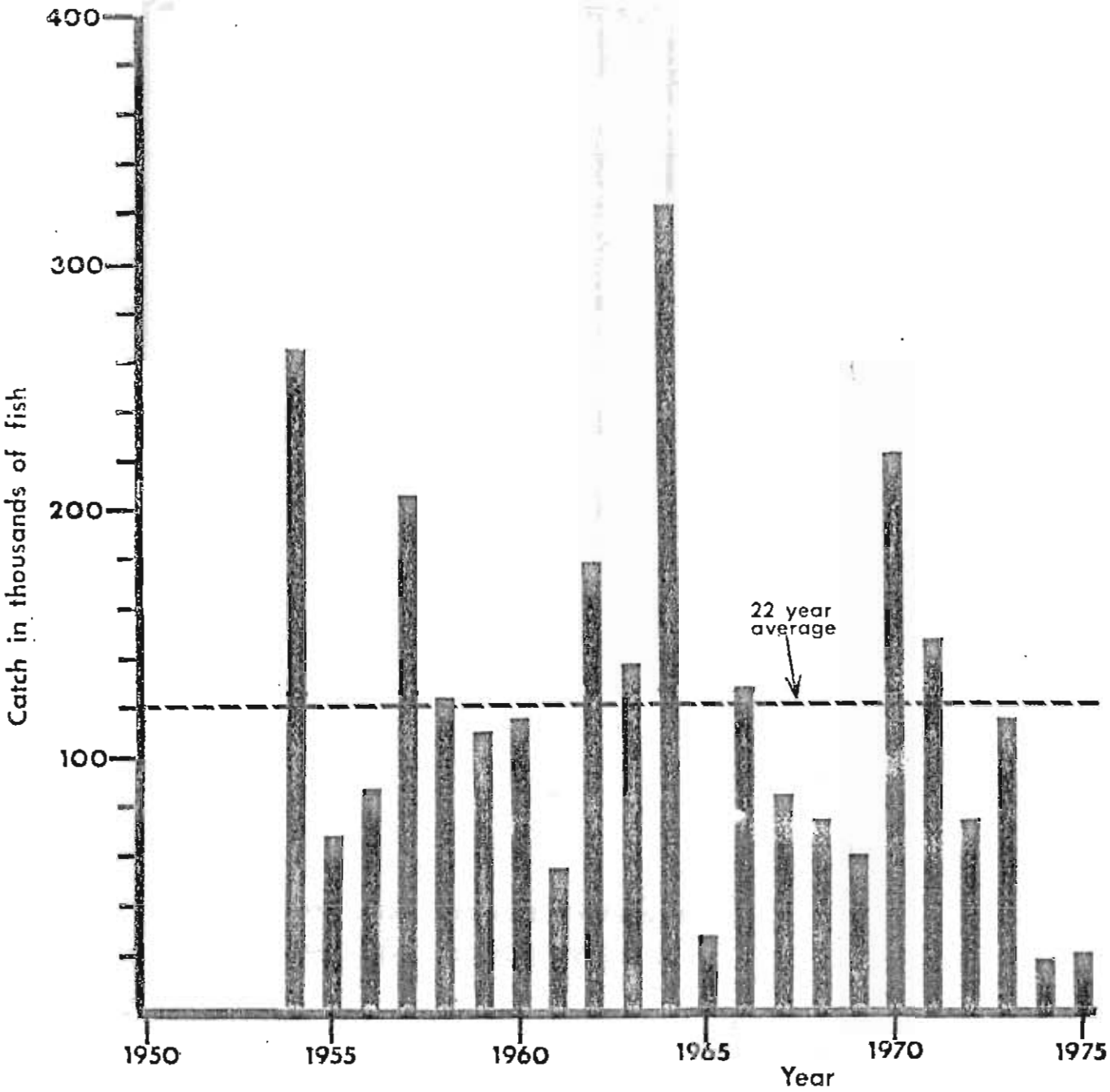


Figure 5. Southern and Outer Districts' pink salmon catch/escapement, 1954-1975.



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TABLES

Table 1. Lower Cook Inlet salmon catch by species, sub-statistical area, district and gear, 1975. 1/

DISTRICT	SPECIES KING	SOCKEYE	COHO	PINK	CHUM	TOTAL
OUTER						
232-10	0	3	0	1,274	476	1,753
-15	0	2	0	31,360	3,164	34,526
-21	0	0	1	2,791	0	2,792
-30	0	109	0	78	6	193
-40	0	596	0	383	2	981
242-10	0	5	3	16,007	635	16,650
-32	0	1	0	18,111	254	18,366
-42	0	4	3	90,287	6,813	97,107
OUTER DIST. TOTAL	0	720	7	160,291	11,350	172,368
SOUTHERN						
241-11	0	4	0	13,185	0	13,189
-12	0	0	0	2,534	0	2,534
-13	0	0	232	1,529	0	1,761
-14	5	137	50	242,136	7	242,335
-15	16	3,412	170	97,215	40	100,853
-16	55	12,599	674	89,151	1,994	104,473
-17	28	2,071	33	429,636	1,166	432,934
-20	38	4,690	1,560	15,968	1,626	23,882
-30	0	4,480	320	2,355	595	7,750
Seine Total	46	805	702	844,219	1,408	847,180
Set Net Total	96	26,588	2,337	49,490	4,020	82,531
SOUTHERN DIST. TOTAL	142	27,393	3,039	893,709	5,428	929,711
EASTERN DIST. TOTAL 2/	1	0	124	0	0	125
KAMISHAK						
243-10	0	0	549	0	0	549
-30	0	28	37	9,025	0	9,090
-40	0	0	1	375	1	377
248-10	0	1	16	30	1,963	2,010
-20	0	0	66	2	2,763	2,831
-40	0	0	2,372	0	141	2,513
KAMISHAK DIST. TOTAL	0	29	3,041	9,432	4,868	17,370
Seine Total	46	1,554	3,750	1,013,942	17,626	1,036,918
Set Net Total	96	26,588	2,337	49,490	4,020	82,531
Misc.	1	0	124	0	0	125
LOWER COOK INLET TOTAL	143	28,142	6,211	1,063,432	21,646	1,119,574
PERCENT OF TOTAL	0.0	2.5	0.6	95.0	1.9	100.0

1/ Data source: 1975 IBM run.
2/ Catches from derby--no seine opening.

Table 2. Lower Cook Inlet Salmon seine catches by species, statistical week and district, 1975. 1/

WEEK	GEAR	KING	SOCKEYE	COHO	PINK	CHUM	TOTAL
			SPECIES				
			Southern district				
28	29	2	53	0	41,103	73	41,231
29	33	29	344	9	207,145	100	207,627
30	39	2	201	26	123,608	393	124,230
31	37	12	156	28	323,144	224	323,564
32	33	1	50	54	125,800	618	126,523
33	12	0	1	148	18,472	0	18,621
34	3	0	0	100	4,947	0	5,047
36	1	0	0	337	0	0	337
TOTAL	56	46	805	702	844,219	1,408	847,180
			Outer district				
28	4	0	5	2	2,781	171	2,959
29	1	0	315	0	7	0	322
30	13	0	283	0	27,891	3,219	31,393
31	28	0	5	4	88,802	2,824	91,635
32	15	0	112	1	39,457	5,130	44,700
33	9	0	0	0	1,353	6	1,359
TOTAL	35	0	720	7	160,291	11,350	172,368
			Kamishak district				
32	1	0	28	33	8,536	1	8,598
33	1	0	0	5	864	0	869
34	3	0	0	4	6	174	184
35	4	0	1	2,384	24	1,930	4,339
36	5	0	0	615	2	2,763	3,380
TOTAL	8	0	29	3,041	9,432	4,868	17,370
			Total All Districts				
28	33	2	58	2	43,884	244	44,190
29	34	29	659	9	207,152	100	207,949
30	46	2	484	26	151,499	3,612	155,623
31	65	12	161	32	411,946	3,048	415,199
32	49	1	190	88	173,793	5,749	179,821
33	22	0	1	153	20,689	6	20,849
34	6	0	0	104	4,953	174	5,231
35	4	0	1	2,384	24	1,930	4,339
36	6	0	0	952	2	2,763	3,717
TOTAL	63	46	1,554	3,750	1,013,942	17,626	1,036,918
PERCENT		0.0	0.1	0.4	97.8	1.7	100.0

1/ Data source: 1975 IBM run.

Table 3. Southern District set net catches by species and statistical week, 1975. 1/

WEEK	GEAR	KING	SOCKEYE	COHO	PINK	CHUM	TOTAL
23	11	1	759	0	2	8	770
24	16	6	1,827	0	17	82	1,932
25	18	8	2,057	1	174	189	2,429
26	21	2	2,223	2	1,153	253	3,633
27	19	4	4,283	7	4,755	474	9,523
28	19	18	4,717	25	8,084	384	13,228
29	20	27	6,083	319	13,747	735	20,911
30	20	27	2,700	346	8,680	775	12,528
31	18	3	1,348	195	9,331	771	11,648
32	12		428	77	3,174	262	3,941
33	3		154	55	364	59	632
35	2		8	294	8	23	333
36	4		1	830	1	5	837
37	4		0	186	0	0	186
TOTAL	27	96	26,588	2,337	49,490	4,020	82,531
PERCENT		0.1	32.2	2.8	60.0	4.9	100.0

Table 4. Estimated Pink Salmon Escapements in Thousands of Fish for the Nine Index Streams in the Southern and Outer Districts of Cook Inlet. 1/

YEAR	HUMPY	TUTKA 3/	SELDOVIA	PORT GRAHAM	WINDY LEFT 6/	WINDY RIGHT	ROCKY 8/	PORT DICK 6/	ISLAND CREEK	TOTAL
1964	18.5 2/	20.0	60.0	16.0	7.7	6.2	80.0	31.5	30.0	269.9
1965	28.0	20.0	30.0	1.5	10.0	2.0	.3	50.0	.5	142.3
1966	30.0	12.0	86.0	24.0	7.0	7.0	44.0	35.0	7.0	252.0
1967	25.0	7.0	55.0	2.0	6.0	6.0	1.0	20.0	.5	122.5
1968	24.7	7.9	53.2	24.4	6.9	2.8	43.1	29.0	4.3	196.3
1969	5.4	6.5	60.0	4.0	23.0	3.2	1.0	12.0	.1	115.2
1970	55.2	6.5	23.0	16.6	13.0	2.1	32.0	34.5	5.5	188.4
1971	45.0	16.7	31.1	13.2	35.4	13.0	1.6	97.8 2/	.1	253.9
1972	13.8	1.5	5.8	2.4	.4	.1	8.2	10.0 2/	1.7	43.9
1973	36.9	6.5	14.5	7.0	12.9	4.6	2.0	26.4 2/	.5	111.3
1974	17.4	2.6	13.7	2.8	.1	.1	1.5	1.5 2/	.5	40.2
1975	64.0	17.6	36.2	27.3	18.7	9.7	4.4	62.8 2/	.1	240.8
Total	363.9	124.8	468.5	141.2	141.1	56.8	218.6	407.5	50.8	1,973.1
Avg	30.3	10.4	39.0	11.8	11.8	4.7	18.2	34.0	4.2	164.4
Escape. Range	22.5-30	4.5-7 5/	24-30	20-40	7.5-10	7.5-10	37.5-50	22.5-30	10-15	156-222 even yr 221-317 odd yr

1/ Escapement estimate derived from peak counts or calculated from counts made throughout the spawning season. When series counts were available, the total fish/days was divided by average stream life (2.5 weeks) to estimate total escapement).
2/ Weir counts.
3/ Does not contain F.R.E.D. egg facility pink salmon adult harvests of 3,400 in 1975.
4/ Due to flooding, expanded aerial survey counts were used to fill vacancies in ground counts.
5/ An additional 20,000 adults are needed for hatchery egg-take requirements.
6/ Escapement ranges have been increased to 25-35,000 for Windy Left and 70-100,000 in Port Dick in years where large numbers of upstream spawners return.

Table 5. Estimated Chum Salmon Escapements in Thousands of Fish in the Major Spawning Systems in Lower Cook Inlet. 1/

YEAR	PORT GRAHAM	DOGFISH LAGOON	ROCKY RIVER	PT DICK HEAD	ISLAND CREEK	BIG KAMISHAK	LITTLE KAMISHAK	McNEIL RIVER	BRUIN BAY	URSUS COVE	COTTONWOOD CREEK	INISKIN BAY	TOTAL
1964	1.0	12.0	5.0	8.0	8.0	25.0	*	90.0	*	*	*	11.0	160.0
1965	*	3.5	*	3.5	4.0	*	*	*	*	*	*	0.7	11.7
1966	*	11.0	7.0	4.0	6.0	5.0	0.5	*	*	*	*	*	33.5
1967	*	15.0	5.0	3.0	5.0	*	*	*	*	*	*	*	28.0
1968	1.5	1.5	3.0	20.0	1.5	*	*	*	*	*	5.0	5.0	37.5
1969	*	*	3.0	4.5	4.0	*	*	*	*	*	*	*	11.5
1970	0.9	5.0	*	6.0	8.5	*	*	*	*	*	0.6	*	21.0
1971	1.0	5.0	7.0	3.0	3.5	*	*	*	1.0	*	9.0	13.0	42.5
1972	1.5	3.0	3.0	6.0	2.0	*	*	*	1.0	1.6	4.0	10.0	32.1
1973	2.0	1.0	2.0	9.0	7.0	4.0	1.0	10.0	8.0	3.0	4.0	12.0	63.0
1974	0.5	0.6	1.0	0.8	5.0	7.1	0.6	1.5	3.0	3.5	2.5	7.0	33.1
1975	3.0	5.0	25.0	4.0	7.4	1.1	1.9	1.5	1.5	5.0	8.0	7.0	70.4
12 Year Total	11.4	62.6	61.0	71.8	61.9	42.2	4.0	103.0	14.5	13.1	33.1	65.7	544.3
Avg	1.4	5.7	6.1	6.0	5.2	6.0	1.0	25.8	2.9	3.3	4.7	8.2	45.4
Escape. Goal	4.0-5.0	10-15	20-40	4.0-5.0	10-15	20-50	20-30	20-50	5-10	8-12	10-15	10-15	141-262

* No surveys conducted due to numerous factors: i.e. weather, money.

1/ Most of these estimated escapements are either peak counts from aerial surveys or adjusted figures from aerial surveys based on survey conditions and time of surveys.

Table 6. Pink salmon alevin density by brood year for index streams in the Southern and Outer districts of Cook Inlet, 1964-1976 7/

YEAR	HUMPY	TUTKA	SELDOVIA	PORT GRAHAM	WINDY LEFT	WINDY RIGHT	ROCKY	PORT DICK	ISLAND CREEK	CHINA POOT 1/	AVE. 9/
1964	199.1	195.8	284.1	242.1	100.1	75.3	131.3	222.7	80.7	0.0	170.1
1965	245.7	154.7	151.3	40.5	21.2	48.4	0.0 2/	140.6	0.0	244.3	90.2
1966	131.3	120.5	136.6	165.7	28.3	13.9	11.4	43.4	67.4	673.8	79.8
1967	42.0	40.5	177.8 3/	58.1	39.8	83.9	0.0 2/	315.6	0.0	973.8	84.6
1968	628.4 5/	516.5	506.5	302.2	94.6	195.2	142.0 4/	236.1	67.3	1,933.6	298.8
1969	161.4 5/	348.0	493.2	247.9	325.8	779.0	0.0 2/	195.8	0.0	0.0	283.5
1970	517.6	0.0 6/	0.0 6/	106.3	44.1	67.8	0.0 6/	62.4	23.7	0.0 6/	
1972	94.7	149.3	208.3	79.2	0.0 2/	0.0 2/	18.0	39.8	11.8	1,035.1	66.8
1973	377.6	495.4	405.1	187.6	157.7	422.2	0.0	90.6	0.0 2/	0.0	237.4
1974	391.1	584.3	553.2	167.7	0.0 2/	0.0 2/	0.2	25.4	0.0 2/	1,181.5	191.3
1975	724.1	581.3	368.1 8/	379.6	174.5	448.9	22.6	192.2 8/	0.0 2/	1,667.8	321.3
1976	214.0	372.8	315.7	85.7	0.0 2/	0.0 2/	0.5	144.5	0.0 2/	448.7	125.9
TOTAL	3,727.0	3,559.1	3,599.9	2,062.6	986.1	2,134.6	326.0	1,722.1	250.9	8,158.6	1,949.7
Average	310.6	323.6	327.3	171.9	82.2	177.9	27.2	143.5	20.9	741.7	177.2

1/ This stream was not used in further calculations (weighted averages).
2/ Estimated zero fry density since escapements were estimated to be below 300 spawners.
3/ Used average pre-emergent fry density from previous two odd years. Not sampled for 1967.
4/ Average even-year density from years 1962, 1964, and 1966.
5/ Used sample size of 150 points.
6/ Not sampled due to ice conditions.
7/ Sampling invalid due to lateness in 1971.
8/ Possibly had some early outmigration of pink salmon fry.
9/ Averages do not include China Poot.

Table 7. Pink Salmon Catches for Lower Cook Inlet in Thousands of Fish by Bay During Odd Numbered Years. 1/

Catch Location	1959	1961	1963	1965	1967	1969	1971	1973	1975
Humpy Creek	13.2	67.9	57.4	13.8	40.4	0.6	11.4	44.3	339.4
Tutka Bay	14.4	106.8	37.7	44.6	31.6	32.4	10.3	20.0	89.2
Seldovia Bay	4.9	15.1	1.6	19.2	11.7	28.7	27.3	19.4	429.6
Port Graham Bay	5.3	1.0	2.7	12.4	5.1	2.0	1.0	13.9	18.3
Dogfish Bay	1.6	0	0	0.1	2.3	0	10.4	0.3	0
Port Chatham	1.2	0	0.8	0	0	0	26.3	12.0	16.0
Windy Bay	3.1	2.2	0	5.4	0	0	57.3	68.5	18.1
Rocky Bay	2.3	0	1.4	0.1	0	0	0.1	0.2	0
Port Dick Bay	28.2	92.9	19.0	15.3	259.9	51.5	94.6	96.6	90.3
Nuka Bay	33.3	2.0	0.3	0	0.1	0	119.7	8.1	35.4
Resurrection Bay	8.4	0	0	0	1.2	0	0	0	0
Bruin Bay	0	0	12.3	0.9	2.1	0	11.7	0	0
Rocky-Ursus Coves	3.7	2.7	44.2	0	13.0	52.8	16.4	7.9	0
Iniskin-Cottonwood Bays	1.5	3.3	21.8	0	0.1	26.0	0	4.7	0
Miscellaneous	3.6	9.5	4.4	3.8	8.0	8.4	6.4	11.5	27.1
Total	124.7	303.4	203.6	115.6	375.5	202.4	392.9	307.4	1,063.4

1/ Data source IBM computer runs, 1959-1975.

Table 8. Chum Salmon Catches for Lower Cook Inlet in Thousands of Fish by Bay by Year. 1/

Catch Location	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Tutka	0.1	2.4	1.8	2.9	2.4	5.6	1.1	3.9	4.0	1.3	0.7
Port Graham	2.3	1.8	0.5	4.0	3.8	2.1	0.9	5.3	3.0	2.3	1.3
Dogfish	4.9	0.4	0.1	0	0.2	0	0	7.0	15.3	0.1	0
Port Chatham	1.0	2.5	0	2.8	4.3	5.2	0	17.8	0	1.0	0
Rocky-Windy	14.9	6.4	2.2	8.5	0.3	33.8	8.1	1.7	0	0.5	0
Port Dick	42.4	53.9	36.8	112.0	110.8	227.4	14.2	60.9	36.0	10.9	5.4
Nuka	1.7	8.4	1.7	0.5	1.5	0	0	0	1.5	6.9	0
Resurrection	0.1	0.5	0	0	0	0	0	0	0.1	0.7	0
Douglas River	0.2	0	0	0	0	0	0	0	0	0	0
Kamishak River	0	0	0	0	0	0	0	0	0	3.7	0
McNeil River	0	0.4	0	0	0	2.7	0.9	0	0.4	8.3	4.4
Bruin	0	0.3	0.5	0	0.1	0	0.4	0	1.0	7.5	0
Ursus-Rocky Coves	8.5	8.6	1.8	1.1	2.8	1.2	0	4.0	2.9	1.0	3.6
Cottonwood-Iniskin	12.1	35.4	10.2	41.7	10.9	38.4	0	0	19.0	25.5	44.4
Miscellaneous	23.7	0	0	5.8	1.4	6.9	2.5	28.5	2.2	5.4	1.4
Total	110.8	116.1	55.6	179.3	138.5	323.3	28.1	129.1	85.4	75.1	61.2

Table 8. Chum Salmon Catches for Lower Cook Inlet in Thousands of Fish by Bay. 1/ (continued)

Catch Location	1970	1971	1972	1973	1974	1975
Tutka	1.6	0.5	1.3	0.8	1.4	2.0
Port Graham	4.8	2.0	3.2	2.6	1.0	2.2
Dogfish	50.9	114.5	41.1	0.4	0	0
Port Chatham	0.1	2.4	0	0.2	0	0.6
Rocky-Windy	39.4	1.4	0	0.9	0	0.3
Port Dick	21.8	0.7	0	33.4	8.1	6.8
Nuka	5.9	0.1	2.3	40.8	3.9	3.6
Resurrection	0.6	0.4	0.7	0	0	0
Douglas River	0	0	0	0	0	0.1
Kamishak River	0	0	2.4	0	0	0
McNeil River	1.9	0	2.3	0	2.0	0
Bruin	12.8	1.6	1.8	0	0.7	0
Ursus-Rocky Coves	8.9	10.3	0.2	5.7	0	2.0
Cottonwood-Iniskin	71.9	14.5	19.7	29.9	0	2.8
Miscellaneous	3.6	0.2	0.5	0.8	2.1	1.2
Total	224.2	148.6	75.5	115.5	19.2	21.6

1/ Data source IBM computer runs, 1959-1975.

Table 9. Sockeye Salmon Catches for Lower Cook Inlet in Thousands of Fish by Bay. 1/

Catch Location	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Resurrection Bay	0	0.1	0	0	0	0	0	0	0	74.5	99.4	1.7
Aialik Bay	1.3	0.2	4.3	2.6	0.5	0	0	0	0	0	0	3.1
Nuka Bay	8.3	6.7	8.2	5.1	0.5	0	2.0	0	2.2	1.5	0	1.0
Humpy Creek	1.3	1.4	0.8	2.0	1.1	0.7	1.4	1.5	1.9	2.7	1.6	1.3
Tutka Bay	1.1	1.7	3.0	5.2	2.9	9.0	5.2	6.0	11.8	6.3	4.9	6.0
Seldovia Bay	0.4	1.2	1.2	1.7	1.2	2.1	0.9	1.0	2.2	1.9	0.8	1.2
Port Graham Bay	6.6	7.8	5.2	6.8	7.8	5.5	3.5	2.7	10.4	7.7	4.3	3.7
Kamishak Bay	1.5	0.8	0	0	0	2.0	0.8	0	0.2	0.5	10.7	2.9
Miscellaneous	1.1	4.8	1.0	1.9	1.1	1.4	2.0	4.1	3.0	0.1	11.0	1.4
Total	21.6	24.7	22.8	25.3	15.1	20.7	14.0	15.3	29.0	95.2	122.8	22.3

1/ Data source IBM computer runs, 1959-75.

Table 9. Sockeye Salmon Catches for Lower Cook Inlet in Thousands of Fish by Bay. 1/ (Continued)

Catch Location	1971	1972	1973	1974	1975
Resurrection Bay	2.2	0.1	0	0	0
Aialik Bay	0	0.3	3.1	0.2	0.6
Nuka Bay	1.6	26.1	1.5	0.2	0
Humpy Creek	1.3	3.7	2.1	3.0	3.5
Tutka Bay	10.0	14.8	8.1	10.8	12.6
Seldovia Bay	1.5	2.3	2.2	2.3	2.1
Port Graham Bay	5.6	10.5	11.7	10.9	9.2
Kamishak Bay	0	0	0	0	0
Miscellaneous	0	1.0	5.0	0	1.0
Total	22.2	57.9	29.2	27.4	28.1

1/ Data source IBM computer runs, 1959-75.

Table 10. Salmon Catches by Species for Set Gill Nets in the Southern District of Lower Cook Inlet, 1958-1975. 1/

YEAR	KINGS	SOCKEYE	COHOS	PINKS	CHUMS	TOTAL
1958	42	3,872	165	2,293	2,274	8,646
1959	49	6,148	377	4,342	361	11,277
1960	6	7,007	398	3,894	347	11,652
1961	15	8,631	216	8,201	425	17,488
1962	13	11,793	1,281	12,207	1,558	26,852
1963	9	8,305	314	1,490	812	10,930
1964	5	16,632	1,576	25,935	1,972	46,120
1965	9	10,998	314	7,267	679	19,267
1966	31	10,317	505	24,981	1,790	37,624
1967	112	22,097	504	13,962	1,929	38,604
1968	31	15,741	1,431	12,614	1,289	31,106
1969	33	11,570	246	10,717	1,298	23,864
1970	26	11,455	1,154	18,512	1,575	32,722
1971	41	18,398	1,449	8,564	1,352	29,804
1972	69	31,340	323	6,303	2,819	40,854
1973	134	23,970	1,089	20,222	2,374	47,789
1974	175	26,996	3,010	11,097	2,713	43,991
1975	96	26,588	2,337	49,490	4,020	82,531
18 Yr Total	896	271,858	16,689	242,091	29,587	561,121
18 Yr Avg	50	15,103	927	13,450	1,643	31,173
% of Total	0.16	48.44	2,97	43.14	5,27	99.98

1/ Data source: Final IBM computer runs 1958-1975.

Table 11. Lower Cook Inlet Salmon Catch by species, 1954-1975. 1/

Year	King	Sockeye	Coho	Pink	Chum	Total
1954	1,545	39,626	15,159	270,744	265,591	592,665
1955	573	36,600	9,675	1,184,328	68,710	1,299,886
1956	333	36,306	9,345	207,920	88,218	342,122
1957	419	26,917	1,765	285,613	206,450	521,164
1958	120	19,450	1,796	949,766	124,482	1,095,614
1959	132	21,637	6,352	124,748	110,838	263,707
1960	27	24,726	2,692	611,647	116,082	755,174
1961	41	22,776	1,619	303,377	55,593	383,406
1962	60	25,286	7,727	2,248,341	179,259	2,460,673
1963	96	15,121	6,736	203,616	138,510	364,079
1964	91	20,654	9,460	1,055,417	323,335	1,408,957
1965	10	14,002	862	115,598	28,076	158,548
1966	62	15,333	5,411	579,240	129,062	729,108
1967	176	29,044	2,726	375,488	85,445	492,879
1968	64	95,242	4,883	585,441	75,134	760,764
1969	64	122,796	623	202,444	61,203	387,130
1970	107	22,312	4,860	574,284	224,158	825,721
1971	73	22,234	4,561	392,871	148,602	568,341
1972	88	57,897	2,234	28,663	75,543	164,425
1973	145	29,209	2,101	307,403	115,513	454,371
1974	183	27,428	6,514	50,601	19,210	103,936
1975	143	28,142	6,211	1,063,432	21,646	1,119,574
22 Yr Total	4,552	752,738	113,312	11,720,982	2,660,660	15,252,244
22 Yr Avg	207	34,215	5,151	532,772	120,939	693,284
% of Total	0.03	4.94	0.74	76.85	17.44	100.00

1/ Data source: Final IBM computer runs, 1954-1975.

Table 12. Southern District Salmon Catch By Species 1954-1975. 1/

Year	King	Sockeye	Coho	Pink	Chum	Total
1954	1,532	22,913	12,235	180,977	150,769	368,426
1955	562	30,848	3,230	565,216	24,398	624,254
1956	310	33,054	4,693	150,486	53,515	242,058
1957	286	19,431	1,507	130,511	57,403	209,138
1958	119	17,731	1,713	209,798	24,096	253,457
1959	71	7,720	709	50,244	13,967	72,711
1960	12	12,239	1,237	209,989	4,100	227,577
1961	39	10,104	1,149	191,867	2,916	206,075
1962	58	16,569	2,095	564,050	9,078	591,850
1963	88	13,142	4,020	99,820	7,523	124,593
1964	84	17,283	8,905	266,412	11,529	304,213
1965	10	11,185	733	90,260	2,458	104,646
1966	60	12,192	4,807	177,544	28,754	223,357
1967	173	26,349	2,379	92,793	23,416	145,110
1968	61	18,716	4,671	154,033	4,403	181,884
1969	59	12,578	485	70,753	2,600	86,475
1970	91	13,480	3,705	208,114	8,174	233,564
1971	41	18,403	3,151	50,066	2,857	74,518
1972	69	31,345	1,283	9,126	4,936	46,759
1973	139	24,145	1,241	97,574	3,588	126,687
1974	182	27,029	3,054	48,875	2,725	81,865
1975	142	27,393	3,039	893,709	5,428	929,711
22 Yr Total	4,188	423,849	70,041	4,512,217	448,633	5,458,928
22 Yr Avg	190	19,266	3,184	205,101	20,392	248,133
% of Total	0.08	7.76	1.28	82.66	8.22	100.00

1/ Data source: Final IBM computer runs, 1954-1975.

Table 13. Outer District Salmon Catch By Species, 1954-1975. 1/

Year	King	Sockeye	Coho	Pink	Chum	Total
1954	13	4927	368	82,205	112,877	200,390
1955	7	701	277	557,997	40,887	599,869
1956	23	2,889	190	42,368	19,248	64,718
1957	13	2,982	110	149,197	138,171	290,473
1958	1	1,719	83	739,768	100,386	841,957
1959	3	8,049	109	69,054	59,996	137,211
1960	4	11,614	574	381,375	67,187	460,754
1961	2	12,671	456	105,491	40,212	158,832
1962	2	8,697	1,893	1,684,023	126,767	1,821,382
1963	6	1,974	369	21,471	117,095	140,915
1964	2	1,370	431	767,473	269,514	1,038,790
1965	0	2,009	7	21,886	22,443	46,345
1966	1	3,120	357	398,751	87,620	489,849
1967	2	2,165	70	262,258	37,533	302,028
1968	1	1,550	106	191,691	20,398	213,746
1969	0	92	11	51,533	5,400	57,036
1970	5	4,177	243	302,831	118,746	426,002
1971	11	1,630	174	310,710	118,995	431,520
1972	7	26,423	17	1,005	43,490	70,942
1973	1	5,063	31	197,259	76,341	278,695
1974	1	399	28	1,678	11,931	14,037
1975	0	720	7	160,291	11,350	172,368
22 Yr Total	105	104,941	5,911	6,500,315	1,646,587	8,257,859
22 Yr Avg	5	4,770	269	295,469	74,845	375,357
% of Total	+	1.27	0.07	78.72	19.94	100.00

1/ Data source: Final IBM computer runs, 1954-1975.

Table 14. Kamishak Bay District Salmon Catch by species, 1954-1975. 1/

Year	King	Sockeye	Coho	Pink	Chum	Total
1954	0	0	0	0	0	0
1955	0	2	8	5,121	278	5,409
1956	0	67	701	193	14,936	15,897
1957	0	4,335	29	5,905	10,856	21,125
1958	0	0	0	0	0	0
1959	0	1,549	43	5,325	23,574	30,491
1960	11	768	28	11,563	44,328	56,698
1961	0	1	14	6,019	12,465	18,499
1962	0	20	11	219	43,404	43,654
1963	2	4	97	82,314	13,892	96,309
1964	5	1,979	115	20,719	42,280	65,098
1965	0	808	122	3,452	3,175	7,557
1966	1	21	247	2,945	12,688	15,902
1967	1	182	74	17,340	24,221	41,818
1968	0	492	101	198,253	49,461	248,307
1969	2	10,723	121	80,157	53,193	144,196
1970	0	2,888	220	23,113	96,605	122,826
1971	0	3	121	32,094	26,327	58,545
1972	0	47	31	342	26,374	26,794
1973	0	1	28	12,568	35,584	48,181
1974	0	0	2,915	48	4,554	7,517
1975	0	29	3,041	9,432	4,868	17,370
22 Yr Total	22	23,919	8,067	517,122	543,063	1,092,193
22 Yr Avg	1	1,087	367	23,506	24,685	49,645
% of Total	+	2.19	0.74	47.35	49.72	100.00

1/ Data source: Final IBM computer runs, 1954-1975.

Table 15. Eastern District Salmon Catch by species, 1954-1975. 1/

Year	King	Sockeye	Coho	Pink	Chum	Total
1954	0	11,786	2,556	7,562	1,945	23,849
1955	4	5,049	6,160	55,994	3,147	70,354
1956	0	296	3,761	14,873	519	19,449
1957	120	169	119	0	20	428
1958	0	0	0	200	0	200
1959	58	4,319	5,491	125	13,301	23,294
1960	0	105	853	8,720	467	10,145
1961	0	0	0	0	0	0
1962	0	0	3,728	49	10	3,787
1963	0	1	2,250	11	0	2,262
1964	0	22	9	813	12	856
1965	0	0	0	0	0	0
1966	0	0	0	0	0	0
1967	0	348	203	3,097	275	3,923
1968	2	74,484	5	41,464	872	116,827
1969	3	99,403	6	1	10	99,423
1970	11	1,767	692	40,226	633	43,329
1971	21	2,198	1,115	1	423	3,758
1972	12	82	903	18,190	743	19,930
1973	5	0	801	2	0	808
1974	0	0	517	0	0	517
1975	1	0	124	0	0	125
22 Yr Total	237	200,029	29,293	191,328	22,377	443,264
22 Yr Avg	11	9,092	1,332	8,697	1,017	20,148
% of Total	0.05	45.13	6.61	43.16	5.05	100.00

1/ Data source: Final IBM computer runs, 1954-1975.

Table 16. Subsistence Fishery Catch for the Southern District of Cook Inlet, 1969-1975. 1/

YEAR	ISSUED	RETURNED	PERMITS NOT FISHED	PERCENT RETURNED	KING	RED	COHO	PINK	CHUM	OTHER	TOTAL
1969	47	44	9	93.6	0	9	752	38	0	17	816
1970	78	73	18	93.6	0	12	1,179	143	13	39	1,386
1971	112	95	42	84.8	2	16	1,549	44	7	20	1,638
1972	135	105	41	77.8	1	11	975	48	69	19	1,123
1973	143	128	46	89.5	0	18	1,304	84	40	9	1,455
1974	148	114	66	79.7	0	16	376	43	77	27	539
1975	292	276	55	94.5	4	47	1,960	632	61	95	2,799
7 Year Total	954	839	277	----	7	129	8,095	1,032	267	226	9,756
7 Year Avg	136	120	40	87.7	1	18	1,156	147	38	32	1,394

1/ A subsistence fishery occurred in Resurrection Bay from 1970 to 1972 with a total catch of 222 salmon of which 92 percent were red salmon.

APPENDIX TABLES

Appendix Table 1. Emergency order commercial fishing periods in Lower Cook Inlet, 1975.

Number	Date	Description
14-75	June 24	Opens the Kamishak District south of the northern tip of Nordyke Island and west of 154° W. long. at 6:00 a.m. Thursday June 26.
15-75	July 3	Closes the Kamishak District at 6:00 a.m. July 5.
16-75	July 7	Opens Seldovia Bay south of a line from Seldovia Point to Point Naskowhak to markers on Powder Island by flare, and opens Dogfish Bay and Port Chatham for 48 hours from 6:00 a.m. Thursday July 10 until 6:00 a.m. Saturday July 12.
18-75	July 11	Opens the Outer District from Harrington Point to Aialik Cape at 6:00 a.m. Monday July 14. The area for a ½ mile radius around the mouth of Delight Creek will remain closed and fishing will be allowed in Aialik Lagoon.
19-75	July 11	Opens the Tutka Bay and Sadie Cove area south of a line from Anisom Point in Eldred Passage to Yukon Island then southwest to the eastern point of Jakalof Bay at 6:00 a.m. Monday July 14. Fishing will remain closed south of the HEA powerline in Tutka Bay.
20-75	July 14	Opens the Southern District from Point Pogibshi to Seldovia Point at 6:00 a.m. Wednesday July 16 with the markers at Powder Island in effect.
21-75	July 17	Moved markers in Seldovia Bay further south by flare at 6:00 a.m. July 18.
22-75	July 17	Opens the Southern District from English Bay to Point Pogibshi and removes the markers at the HEA powerline in Tutka Bay at 6:00 a.m. Monday July 21.
24-75	July 20	Moved the inside markers at Seldovia Bay back to Powder Island at 6:00 a.m. Monday July 21.
27-75	July 22	Opened the entire Southern District at 6:00 a.m. Thursday July 24, but kept the area closed between Department markers at Mallard Bay and Glacier Spit.

Appendix Table 1. Emergency order commercial fishing periods in Lower Cook Inlet, 1975. Continued.

Number	Date	Description
28-75	July 23	Opens the Outer District from Gore Point to Harrington Point at 6:00 a.m. Friday July 25 until 6:00 a.m. Monday July 28 and from then on during the regular two 48 hour periods. Fishing will not be allowed inside the mouth of South Nuka Creek, but the entire beach is open.
29-75	July 24	Moves the markers by flare in Seldovia Bay further south at approximately 6:00 a.m. Friday July 25.
30-75	July 25	Allows fishing for seines and set gillnets seven days per week in the Southern District and adjusts markers at Humpy Creek at 6:00 a.m. Monday July 28. Also opens the Outer District from Claim Point in Port Chatham to the tip of the peninsula near Badger Hill in Windy Bay and then due north at 6:00 a.m. Monday July 28.
31-75	July 27	The markers in Seldovia Bay, off Barabara Creek and at Tutka Lagoon are removed effective at 6:00 a.m. Monday July 28.
32-75	July 29	Markers at Humpy Creek are removed at 6:00 p.m. Monday July 28. The markers at Windy Bay were moved at 8:00 p.m. Monday July 28.
33-75	July 29	Opens Port Dick Bay at 6:00 a.m. Thursday July 31, but keeps the area along the northshore closed between the bluff on the west side of Middle Creek to the waterfalls southeast of Island Creek.
34-75	August 4	Moves markers further in the bay at Port Dick and Port Chatham at 2:30 p.m. Thursday July 31. Tutka Lagoon will close to fishing and the Southern District will go back to the regular two 48 hour fishing periods at 6:00 a.m. Monday August 4.
36-75	August 4	Closed Aialik Lagoon and moved the markers at Port Dick to the Department cabin at 6:00 a.m. Monday August 4 and opened the northshore closed area at Port Dick at 9:00 a.m. Monday August 4.

Appendix Table 1. Emergency order commercial fishing periods in Lower Cook Inlet, 1975. Continued.

Number	Date	Description
37-75	August 4	Opens the Kamishak District south of the waterfalls north of Bruin Bay at 6:00 a.m. Thursday August 4. A one-half mile radius closure around the mouth of Chenik River will be in effect and fishing will be allowed to within 200 yards of Amakdedori Creek and to within 100 yards of the large pool in Bruin Bay River.
38-75	August 4	Closed the waters of Mud Bay inside a line from a Department marker at Green Timbers to a marker 300 yards east of the airport access road at 6:00 a.m. Thursday August 7.
41-75	August 18	Opens the entire Kamishak District to fishing seven days per week except for Cottonwood Bay west of 153° 33' W. long.

Appendix Table 2. Commercial processors and buyers operating in Lower Cook Inlet.

Commercial Operator	Plant Location	Product
Alaskan Seafoods, Inc. Box 173 Homer, AK 99603	Homer	King Crab Tanner Crab Dungeness Crab Shrimp (trawl) Shrimp (pot) Razor Clams Halibut
Ekren Packing Co. Kasitsna Bay Homer, AK 99603	Kasitsna Bay	Kings Reds
Martin Goreson Box 1436 Seward, AK 99664	Seward	Herring
Homer Seafoods Box 45 Anchor Point 99556	Anchor Point	Shrimp (pot)
J & J Fish Homer, AK 99603	Homer	King Crab Tanner Crab Dungeness Crab Shrimp (trawl) Shrimp (pot) Razor Clams Halibut
Lee's Seafoods 6120 Geronimo Circle Anchorage, AK 99504	Anchorage	King Crab Shrimp (pot)
Russell J. Lohman Box 731 Seward, AK 99664	Seward	Herring (sac roe)
New England Fish Company Pier 89 Seattle, WA 98119	Seward	Scallops
Northern Enterprises Box 746 Homer, AK 99603	Homer	King Crab Dungeness Crab

Appendix Table 2. Commercial processors and buyers operating in Lower Cook Inlet. Continued.

Commercial Operator	Plant Location	Product
Seward Fisheries Box 516 Seward, AK 99664	Seward	Kings Reds Cohos Pinks Chums King Crab Tanner Crab Dungeness Crab Halibut Herring (whole) Herring (roe on kelp)
Seward Marine Services Box 335 Seward, AK 99664	Seward	Herring
Sparky, Inc. Box 160 Seldovia, AK 99663	Seldovia	King Crab
Sportsman's Marine SRA Box 106 Homer, AK 99603	Homer	King Crab
Wakefield Seafoods, Inc. 4215 21st Ave. West Rm. 215 Seattle, WA 98199	Seldovia	King Crab Tanner Crab
Whitney-Fidalgo Seafoods, Inc. 2360 W. Commodore Way Box 99008 Seattle, WA 98199	Port Graham	Kings Reds Cohos Pinks Chums Herring (whole) Salmon roe Herring roe
Whitney-Fidalgo Seafoods, Inc 2360 W. Commodore Way Box 99008 Seattle, WA 98199	Homer	King Crab Tanner Crab Dungeness Crab Razor Clams Halibut

Appendix Table 3. Fishing licenses and permits issued and fished in Lower Cook Inlet, 1960 - 1975.

	SEINES					
Year	Gear License	Permanent Permit	Interim Permit	Total	Seines Fished	Set Nets Fished
1960	95			95		
1961	89			89		
1962	91			91		
1963	112			112		
1964	108			108		
1965	72			72		
1966	77			77	75	
1967	58			58	54	
1968	91			91	88	
1969	75			75	17	
1970	89			89	9	
1971	81			81	32	
1972	83			83	52	
1973	86			86	49	
1974	110			110	49	32
1975		40	48	88	63	27
Total	1,317	40	48	1,405	488	59
Average	88	40	48	88	49	30

Appendix Table 4. Exvessel Value of Lower Cook Inlet Commercial Salmon Harvest in Thousands of Dollars by Species, 1960-1975. 1/

Year	King	Sockeye	Coho	Pink	Chum	Total
1960	0	36	3	287	127	453
1961	0	33	2	144	36	215
1962	0	37	8	1,056	108	1,209
1963	1	22	7	87	84	201
1964	0	30	9	369	194	602
1965	0	21	1	34	20	76
1966	0	23	5	237	82	347
1967	1	45	3	157	58	264
1968	0	152	5	311	57	525
1969	0	219	1	137	46	403
1970	1	35	6	273	215	530
1971	1	38	7	248	144	438
1972	1	130	6	22	146	305
1973	3	113	5	310	251	682
1974	5	283	30	100	77	495
1975	3	106	27	1,456	71	1,663
Total	16	1,323	125	5,228	1,716	8,408
Average	1	83	8	327	107	526

1/ Values obtained by using the formula: average price per lb. X average weight of fish X catch = Exvessel value.

Appendix Table 5. Average Salmon Price per Pound by Species in Dollars, Lower Cook Inlet. 1/

YEAR	KING	SOCKEYE	COHO	PINK	CHUM
1960	0.25 2/	0.27	0.18	0.15	0.16
1961	0.24 2/	0.24	0.15	0.11	0.08
1962	0.23 2/	0.27	0.16	0.15	0.07
1963	0.25 2/	0.27	0.15	0.13	0.08
1964	0.24 2/	0.27	0.15	0.10	0.07
1965	0.22 2/	0.24	0.11	0.08	0.08
1966	0.22 2/	0.24	0.14	0.11	0.08
1967	0.26	0.26	0.15	0.11	0.08
1968	0.00	0.25	0.17	0.18	0.09
1969	0.00	0.27	0.23	0.17	0.13
1970	0.35	0.27	0.18	0.12	0.13
1971	0.53	0.28	0.24	0.18	0.15
1972	0.45	0.36	0.44	0.20	0.28
1973	0.93	0.48	0.39	0.27	0.29
1974	0.76	1.54	0.72	0.48	0.56
1975	0.61	0.61	0.49	0.37	0.43

1/ 1960-1974 values obtained (except as noted) by using formula:
- Avg.price/lb X Avg.weight/fish X Catch = Exvessel value.
- Exvessel and catch values obtained from Tables 34 & 39 in Lower Cook Inlet status report.
- Avg weight/fish from commercial fish catch & production statistical leaflet for Cook Inlet.
- Values do not reflect any retroactive price increases paid after the fishing seasons.

2/ Values obtained by using formula:
- Avg price/lb = $\frac{\text{Avg price/fish}}{\text{Avg weight/fish}}$
- Avg weight/fish from statistical leaflet
- Avg price/fish from annual management reports.

Appendix Table 6. Salmon Average Weight/Fish in Pounds, Lower Cook Inlet. 1/

YEAR	KING	SOCKEYE	COHO	PINK	CHUM
1960	20.2	5.4	6.2	3.2	6.8
1961	20.5	6.0	8.2	4.5	7.8
1962	21.5	5.4	6.4	3.2	8.0
1963	19.7	5.4	7.1	3.4	7.2
1964	20.8	5.4	6.3	3.5	8.4
1965	22.2	6.2	10.1	3.6	8.7
1966	23.1	5.9	6.4	3.6	7.5
1967	21.9	6.0	7.2	3.9	8.1
1968	26.2	6.3	5.9	3.0	8.3
1969	18.2	6.7	7.0	3.9	7.3
1970	26.6	5.8	6.8	3.9	7.1
1971	25.9	6.0	6.3	3.5	6.6
1972	25.0	6.2	6.1	3.9	6.9
1973	22.3	8.1	6.1	3.7	7.4
1974	36.1	6.7	6.4	4.1	7.2
1975	33.2	6.2	8.8	3.7	7.6
16 Yr Average	24.0	6.1	7.0	3.7	7.1

1/ 1960-1974 values obtained from commercial fish catch & production statistical leaflets for all Cook Inlet.

Appendix Table 7. Salmon Case Pack by Species, Cook Inlet, 1960-1975.

	48 1-lb. Cans per Case					
YEAR	KING	SOCKEYE	COHO	PINK	CHUM	TOTAL
1960	9,279	65,478	24,091	87,575	62,709	249,132
1961	12,942	88,687	10,673	30,401	39,092	181,795
1962	8,721	89,231	28,611	208,392	107,724	442,679
1963	8,138	74,185	20,898	13,509	46,209	162,939
1964	921	75,944	40,137	188,373	135,466	440,841
1965	1,221	109,663	11,999	5,911	27,187	155,981
1966	1,472	142,987	22,985	102,796	49,680	319,920
1967	1,909	118,853	15,355	21,492	38,654	196,263
1968	447	58,365	29,290	104,382	122,164	314,648
1969	1,277	43,408	6,985	86,038	26,580	164,288
1970	412	78,453	19,010	80,572	73,633	252,080
1971	1,036	68,357	8,847	91,880	52,223	222,343
1972	396	101,105	10,109	25,195	56,527	193,332
1973	712	53,954	7,049	47,829	87,214	196,758
1974	1,193	52,990	13,482	44,610	85,288	197,563
1975	169	60,359	6,298	55,454	40,491	162,771
Total	50,245	1,282,019	275,819	1,194,409	1,050,841	3,853,333
Average	3,140	80,126	17,239	74,651	65,678	240,833

Appendix Table 8. Commercial Production of fresh, frozen and cured salmon by species, Cook Inlet, 1971-1975. 1/

Year	King	Sockeye	Coho	Pink	Chum	Total
	Production in Pounds					
1971	1,122,833	858,298	230,995	29,043	2,147,814	4,388,983
1972	697,871	661,537	126,717	647,952	1,904,750	4,038,827
1973	434,283	2,251,760	478,334	326,169	5,032,885	8,523,431
1974	474,170	1,239,399	964,636	1,164,061	4,902,531	8,744,797
1975	274,563	1,490,354	851,260	581,883	5,923,465	9,121,525
Total	3,003,720	6,501,348	2,651,942	2,749,108	19,911,445	34,817,563
Average	600,744	1,300,270	530,388	549,822	3,982,289	6,963,513

1/ Includes Cook Inlet salmon and salmon imported from other areas and processed in Cook Inlet.

Appendix

Table 9. Lower Cook Inlet Total Salmon Catch by District, 1954-1975. 1/

Year	Southern	Outer	Kamishak	Eastern	Total
1954	368,426	200,390	0	23,849	592,665
1955	624,254	599,869	5,409	70,354	1,299,886
1956	242,058	64,718	15,897	19,449	342,122
1957	209,138	290,473	21,125	428	521,164
1958	253,457	841,957	0	200	1,095,614
1959	72,711	137,211	30,491	23,294	263,707
1960	227,577	460,754	56,698	10,145	755,174
1961	206,075	158,832	18,499	0	383,406
1962	591,850	1,821,382	43,654	3,787	2,460,673
1963	124,593	140,915	96,309	2,262	364,079
1964	304,213	1,038,790	65,098	856	1,408,957
1965	104,646	46,345	7,557	0	158,548
1966	223,357	489,849	15,902	0	729,108
1967	145,110	302,028	41,818	3,923	492,879
1968	181,884	213,746	248,307	116,827	760,764
1969	86,475	57,036	144,196	99,423	387,130
1970	233,564	426,002	122,826	43,329	825,721
1971	74,518	431,520	58,545	3,758	568,341
1972	46,759	70,942	26,794	19,930	164,425
1973	126,687	278,695	48,181	808	454,371
1974	81,865	14,037	7,517	517	103,936
1975	929,711	172,368	17,370	125	1,119,574
22 Yr Total	5,458,928	8,257,859	1,092,193	443,264	15,252,244
22 Yr Avg	248,133	375,357	49,645	20,148	693,284
% of Total	35.79	54.14	7.16	2.91	100.00

1/ Data source: Final IBM computer runs, 1954-1975.

Appendix
Table 10. King Salmon Catch by District for Lower Cook Inlet, 1954-1975. 1/

Year	Southern	Outer	Kamishak	Eastern	Total
1954	1532	13	0	0	1,545
1955	562	7	0	4	573
1956	310	23	0	0	333
1957	286	13	0	120	419
1958	119	1	0	0	120
1959	71	3	0	58	132
1960	12	4	11	0	27
1961	39	2	0	0	41
1962	58	2	0	0	60
1963	88	6	2	0	96
1964	84	2	5	0	91
1965	10	0	0	0	10
1966	60	1	1	0	62
1967	173	2	1	0	176
1968	61	1	0	2	64
1969	59	0	2	3	64
1970	91	5	0	11	107
1971	41	11	0	21	73
1972	69	7	0	12	88
1973	139	1	0	5	145
1974	182	1	0	0	183
1975	142	0	0	1	143
22 Yr Total	4,188	105	22	237	4,552
22 Yr Avg	190	5	1	11	206
% of Total	92.00	2.31	0.48	5.21	100.00

1/ Data source: Final IBM computer runs, 1954-1975.

Appendix

Table 11. Sockeye Salmon Catch by District for Lower Cook Inlet, 1954-1975. 1/

Year	Southern	Outer	Kamishak	Eastern	Total
1954	22,913	4,927	0	11,786	39,626
1955	30,848	701	2	5,049	36,600
1956	33,054	2,889	67	296	36,306
1957	19,431	2,982	4,335	169	26,917
1958	17,731	1,719	0	0	19,450
1959	7,720	8,049	1,549	4,319	21,637
1960	12,239	11,614	768	105	24,726
1961	10,104	12,671	1	0	22,776
1962	16,569	8,697	20	0	25,286
1963	13,142	1,974	4	1	15,121
1964	17,283	1,370	1,979	22	20,654
1965	11,185	2,009	808	0	14,002
1966	12,192	3,120	21	0	15,333
1967	26,349	2,165	182	348	29,044
1968	18,716	1,550	492	74,484	95,242
1969	12,578	92	10,723	99,403	122,796
1970	13,480	4,177	2,888	1,767	22,312
1971	18,403	1,630	3	2,198	22,234
1972	31,345	26,423	47	82	57,897
1973	24,145	5,063	1	0	29,209
1974	27,029	399	0	0	27,428
1975	27,393	720	29	0	28,142
22 Yr Total	423,849	104,941	23,919	200,029	752,738
22 Yr Avg	19,266	4,770	1,087	9,092	34,215
% of Total	56.31	13.94	3.18	26.57	100.00

1/ Data source: Final IBM computer runs, 1954-1975.

Appendix
Table 12 Coho Salmon Catch by District for Lower Cook Inlet, 1954-1975. 1/

Year	Southern	Outer	Kamishak	Eastern	Total
1954	12,235	368	0	2,556	15,159
1955	3,230	277	8	6,160	9,675
1956	4,693	190	701	3,761	9,345
1957	1,507	110	29	119	1,765
1958	1,713	83	0	0	1,796
1959	709	109	43	5,491	6,352
1960	1,237	574	28	853	2,692
1961	1,149	456	14	0	1,619
1962	2,095	1,893	11	3,728	7,727
1963	4,020	369	97	2,250	6,736
1964	8,905	431	115	9	9,460
1965	733	7	122	0	862
1966	4,807	357	247	0	5,411
1967	2,379	70	74	203	2,726
1968	4,671	106	101	5	4,883
1969	485	11	121	6	623
1970	3,705	243	220	692	4,860
1971	3,151	174	121	1,115	4,561
1972	1,283	17	31	903	2,234
1973	1,241	31	28	801	2,101
1974	3,054	28	2,915	517	6,514
1975	3,039	7	3,041	124	6,211
22 Yr Total	70,041	5,911	8,067	29,293	113,312
22 Yr Avg	3,184	269	367	1,332	5,151
% of Total	61.81	5.22	7.12	25.85	100.00

1/ Data source: Final IBM computer runs, 1954-1975.

Appendix

Table 13. Pink Salmon Catch by District for Lower Cook Inlet, 1954-1975. 1/

Year	Southern	Outer	Kamishak	Eastern	Total
1954	180,977	82,205	0	7,562	270,744
1955	565,216	557,997	5,121	55,994	1,184,328
1956	150,486	42,368	193	14,873	207,920
1957	130,511	149,197	5,905	0	285,613
1958	209,798	739,768	0	200	949,766
1959	50,244	69,054	5,325	125	124,748
1960	209,989	381,375	11,563	8,720	611,647
1961	191,867	105,491	6,019	0	303,377
1962	564,050	1,684,023	219	49	2,248,341
1963	99,820	21,471	82,314	11	203,616
1964	266,412	767,473	20,719	813	1,055,417
1965	90,260	21,886	3,452	0	115,598
1966	177,544	398,751	2,945	0	579,240
1967	92,793	262,258	17,340	3,097	375,488
1968	154,033	191,691	198,253	41,464	585,441
1969	70,753	51,533	80,157	1	202,444
1970	208,114	302,831	23,113	40,226	574,284
1971	50,066	310,710	32,094	1	392,871
1972	9,126	1,005	342	18,190	28,663
1973	97,574	197,259	12,568	2	307,403
1974	48,875	1,678	48	0	50,601
1975	893,709	160,291	9,432	0	1,063,432
22 Yr Total	4,512,217	6,500,315	517,122	191,328	11,720,982
22 Yr Avg	205,101	295,469	23,506	8,697	532,772
% of Total	38.50	55.46	4.41	1.63	100.00

1/ Data source: Final IBM computer runs, 1954-1975.

Appendix
Table 14. Chum Salmon Catch by District for Lower Cook Inlet, 1954-1975. 1/

Year	Southern	Outer	Kamishak	Eastern	Total
1954	150,769	112,877	0	1,945	265,591
1955	24,398	40,887	278	3,147	68,710
1956	53,515	19,248	14,936	519	88,218
1957	57,403	138,171	10,856	20	206,450
1958	24,096	100,386	0	0	124,482
1959	13,967	59,996	23,574	13,301	110,838
1960	4,100	67,187	44,328	467	116,082
1961	2,916	40,212	12,465	0	55,593
1962	9,078	126,767	43,404	10	179,259
1963	7,523	117,095	13,892	0	138,510
1964	11,529	269,514	42,280	12	323,335
1965	2,458	22,443	3,175	0	28,076
1966	28,754	87,620	12,688	0	129,062
1967	23,416	37,533	24,221	275	85,445
1968	4,403	20,398	49,461	872	75,134
1969	2,600	5,400	53,193	10	61,203
1970	8,174	118,746	96,605	633	224,158
1971	2,857	118,995	26,327	423	148,602
1972	4,936	43,490	26,374	743	75,543
1973	3,588	76,341	35,584	0	115,513
1974	2,725	11,931	4,554	0	19,210
1975	5,428	11,350	4,868	0	21,646
22 Yr Total	448,633	1,646,587	543,063	22,377	2,660,660
22 Yr Avg	20,392	74,845	24,685	1,017	120,939
% of Total	16.86	61.89	20.41	0.84	100.00

1/ Data source: Final IBM computer runs, 1954-1975.

Appendix Table 15. Summary of return per spawner and forecast variations in the pink salmon runs to the Southern and Outer Districts of Cook Inlet.

Brood Year	Escapement	Return	Return/ Spawner	Forecast	Variation From Forecast
1964	269.9	897	3.32	1,300,000	- 31.0%
1965	142.3	481	3.38	500,000	- 3.8
1966	252.0	483	1.92	462,000	+ 4.5
1967	122.5	237	1.93	500,000	- 52.6
1968	196.3	701	3.57	2,000,000	- 65.0
1969	115.2	615	5.34	640,000	- 3.9
1972	43.9	91	2.07	340,000	- 73.2
1973	111.3	1,295	11.64	620,000	+ 108.9
1974	40.2	185[1/]	4.60	780,000	- 76.3
1975	240.8	1,512[1/]	6.28	845,000	+ 78.9
Total	1,534.4	6,497	44.05	7,987,000	-
Average	153.4	649.7	4.41	798,700	- 18.7